

Listing of All Claims Including Current Amendments

1. (Currently amended) A method for delivering a peptide into the major histocompatibility complex (MHC) class I antigen processing pathway of an antigen presenting cell to elicit a cytotoxic T lymphocyte (CTL) response, comprising contacting said cell with a mutant of E. coli heat labile enterotoxin B (EtxB) or cholera toxin B (CtxB) covalently linked to said peptide, wherein said mutant comprises at least one of the following point mutations within the region spanning amino acid residues E51 to I58 of the $\beta 4$ - $\alpha 2$ loop of EtxB or CtxB: CtxB (E51A) (SEQ ID NO: 17) , CtxB (Q56A) (SEQ ID NO: 18), CtxB (H57A) (SEQ ID NO: 13), and EtxB (H57S) (SEQ ID NO: 19) thereby delivering said peptide into said cell.
2. (Previously presented) The method of claim 1 wherein the covalently linked peptide is derivable from a protein of interest (POI) or an antigen.
3. (Previously presented) The method of claim 2 wherein the antigen is selected from the group consisting of a viral antigen, a bacterial antigen, a parasitic antigen; and a tumor associated antigen (TAA).
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)

10. (Previously presented) The method of claim 1 wherein the mutant comprises a point mutation at amino acid residues 51, 56 and/or 57 of the β 4- α 2 loop.
11. (Previously presented) The method of claim 1 or claim 10 wherein the mutant comprises a point mutation at H57A or H57S.
12. (Currently amended) A method of preparing a medicament comprising providing a mutant of E. coli heat labile enterotoxin B (EtxB) or cholera toxin B (CtxB) in the preparation of a medicament, wherein the mutant comprises one of the following point mutations within the region spanning amino acid residues E51 to I58 of the β 4- α 2 loop of EtxB or CtxB: CtxB (E51A) (SEQ ID NO: 17) , CtxB (Q56A) (SEQ ID NO: 18), CtxB (H57A) (SEQ ID NO: 13), and EtxB (H57S) (SEQ ID NO: 19) and is capable of delivering an exogenous peptide into the major histocompatibility complex Class I antigen processing and presentation pathways to elicit a cytotoxic T lymphocyte response.
13. (Canceled)
14. (Canceled)
15. (Canceled)
16. (Canceled).
17. (Currently amended) A method of delivering a peptide to the MHC class I antigen processing pathway of an antigen presenting cell, wherein the method comprises:
 - (i) providing an antigen presenting cell;
 - (ii) contacting the cell with a mutant of E. coli heat labile enterotoxin B (EtxB) or cholera toxin B (CtxB) covalently linked to the peptide; the mutant comprises one of the following point mutations within the region spanning amino acid

residues E51 to I58 of the $\beta 4$ - $\alpha 2$ loop of EtxB or CtxB: CtxB (E51A) (SEQ ID NO: 17) , CtxB (Q56A) (SEQ ID NO: 18), CtxB (H57A) (SEQ ID NO: 13), and EtxB (H57S) (SEQ ID NO: 19) and having GM-1 binding activity; but reduced immunogenic and immunomodulatory activity relative to the corresponding wild type form of EtxB or CtxB; and

(iii) monitoring for the presence of the peptide in the antigen presenting cell.

18. (Previously presented) The method of claim 17, further comprising the step of monitoring the elicitation of a cytotoxic T lymphocyte (CTL) response.

19. (Canceled)

20. (Canceled)

21. (Currently amended) A kit for delivering a peptide to the MHC class I antigen processing pathway of an antigen presenting cell wherein the kit comprises: a mutant of E. coli heat labile enterotoxin B (EtxB) or cholera toxin B (CtxB) covalently linked to the peptide; the mutant comprises one of the following point mutations within the region spanning amino acid residues E51 to I58 of the $\beta 4$ - $\alpha 2$ loop of EtxB or CtxB: CtxB (E51A) (SEQ ID NO: 17) , CtxB (Q56A) (SEQ ID NO: 18), CtxB (H57A) (SEQ ID NO: 13), and EtxB (H57S) (SEQ ID NO: 19) and having GM-1 binding activity; but reduced immunogenic and immunomodulatory activity relative to the corresponding wild type form of EtxB or CtxB.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Previously presented) The kit of claim 21, further comprising means for detecting the location of the peptide in the antigen presenting cell.

27. (Previously presented) The method of claim 1 wherein said mutant has GM-1 binding activity but reduced immunogenic and immunomodulatory activity relative to the wild type corresponding form of EtxB or CtxB.